

WHAT IS CLAIMED IS:

1. An apparatus for managing resources in a telecommunications system employing an intelligent distributed network architecture, comprising:

an intelligent data network architecture node, the intelligent data network architecture node including:

an intelligent call processor;

a network management system agent coupled to the intelligent call processor;

a service layer execution environment coupled to the intelligent call processor; and

a first resource complex coupled to the intelligent call processor, the first resource complex including a first switch fabric.

2. The apparatus of claim 1, further comprising a second resource complex coupled to the intelligent call processor, the second resource complex including an intelligent peripheral.

3. The apparatus of claim 1, further comprising an adjunct processor coupled to the intelligent call processor, the adjunct processor configured to provide additional support functions to the intelligent call processor.

4. The apparatus of claim 1, further comprising a wide area network coupled to the intelligent data network architecture node.

5. The apparatus of claim 1, wherein the first resource complex is coupled to customer premises equipment.
6. The apparatus of claim 1, wherein the intelligent call processor is configured to provide a local execution environment for the intelligent data network architecture node.
7. The apparatus of claim 1, wherein the service layer execution environment hosts the execution of managed objects, the managed objects implementing the service processing architecture.
8. The apparatus of claim 1, further comprising a second level processor associated with the intelligent data network architecture node, the second level processor coupled to the intelligent call processor and configured for receiving status information from the intelligent call processor.
9. The apparatus of claim 1, further comprising a network management system coupled to the intelligent data network architecture node, the network management system configured to be responsive to the network management system agent.
10. The apparatus of claim 9, wherein the network management system further comprises a centralized service administration component, the centralized service

administration component configured to provide data storage and network management functionality.

11. A method for managing resources in an intelligent network having one or more service nodes, each service node capable of providing one or more services, comprising:

receiving a communications event corresponding to a requested service, the requested service to be performed at a service node;

instantiating a first set of service objects in a local execution environment at the service node based on the receiving a communications event, the service objects being capable of performing the requested service;

tracking the availability and execution of the first set of service objects at the service node; and

initiating instantiation of a second set of service objects in the local execution environment based on receipt of further requests for service at the node based on the status and availability of information.

12. The method of claim 11, wherein instantiating the service objects further includes determining in which local execution environment the service object are to be executed.

13. The method of claim 11, further comprising maintaining a list of service nodes capable of executing service objects for a requested service in the intelligent network.

14. The method of claim 11, wherein the tracking the availability and execution of the first set of service objects includes determining sub-status for each service object, the sub-status including an active status, the active status indicating the service object can be instantiated at the service node.

15. The method of claim 11, wherein the tracking the status of executing the first set of service objects includes determining sub-status for each service object, the sub-status including an overload status, the overload status indicating the service object can not be instantiated at the service node.

16. The method of claim 11, further comprising tracking status and availability of service objects at the service node, tracking status and availability including:

generating status information from one or more local execution environments at the service node; and

updating a first data storage device with the status information.

17. The method of claim 11, further comprising generating status information, the status information including an alarm indication, the alarm indication indicating the level of usage of a local execution environment.

18. The method of claim 17, wherein instantiating service objects is based on the alarm indication.

19. A computer program product for enabling a processor in a computer system to manage resources in an intelligent network having one or more service nodes, each service node capable or providing one or more services, said computer program product comprising:

a computer usable medium having computer readable program code means embodied in said computer usable medium for causing a program to execute on the computer system, said computer readable program code means comprising:

means for enabling the computer system to receive a communications event corresponding to a requested service, the service to be performed at a service node;

means for enabling the computer system to instantiate one or more service objects capable of performing the requested service in a local execution environment at the service node;

means for enabling the computer system to track the status of executing service objects for the requested service and availability of service objects at the service node; and

means for enabling the computer system to initiate service object instantiation in the local execution environment upon receipt of further requests for service at the node based on the status and availability of information.

20. The computer program product of claim 19, wherein the means for enabling the computer system to instantiate one or more service objects at the node further includes determining in which local execution environment the service object is to be executed.

21. The computer program product of claim 19, further comprising means for enabling the computer system to maintain a list of service nodes capable of executing service objects for a requested service in the intelligent network.

22. The computer program product of claim 19, wherein the means for enabling the computer system to track the status of executing service objects includes determining sub-status for each service object, the sub-status including an active status, the active status indicating the service object can be instantiated at the service node.

23. The computer program product of claim 19, wherein the means for enabling the computer system to track the status of executing service objects includes means for enabling the computer system to determine sub-status for each service object, the sub-status including an overload status, the overload status indicating the service object can not be instantiated at the service node.

24. The computer program product of claim 19, further comprising means for enabling the computer system to track status and availability of service objects at the service node, means for enabling the computer system to track status and availability:

means for enabling the computer system to generate status information from one or more local execution environments at the service node; and

means for enabling the computer system to update a first data storage device with the status information.

25. The computer program product of claim 19, further comprising means for enabling the computer system to generate status information, the status information including an alarm indication, the alarm indication indicating the level of usage of a local execution environment.

26. The computer program product of claim 24, wherein the means for enabling the computer system to instantiate one or more service objects is based on the alarm indication.